

Bicentenary of *An Account of the Foxglove* *Historical address given at Edgbaston Parish Church, Birmingham**

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In a period of less than 30 years' practice William Withering achieved a reputation unsurpassed by any physician before or since. The very large gathering at his funeral in this church on 10 October 1799 and the mural tablet leave no doubt as to the high opinion in which he was held during his lifetime. A verse at his death may well have been thought euphemistic and sentimental:

"Deep in the earth, the debt of nature paid
The mortal part of Withering is laid
And though he seems to share the common lot
Of those who perish and are soon forgot,
His fame will never die! Each future age
Instructed by the labours of his page
Shall hail his honoured name with grateful praise
And bards his skill record in tuneful lays
Of wealth or power short is the transient state
Whilst science soars above the reach of fate!"

How prescient this unknown poet was, for here today, 200 years after the publication of *An Account of the Foxglove*, members of the Association of Physicians of Great Britain and Ireland and the British Cardiac Society together with leaders in cardiology from abroad have spent five hours hotly debating the use of digitalis and a longer period honouring Birmingham's greatest physician and its patron saint of medicine.

Each new drug goes through three major phases. In the first it is the cure for everything and it is criminal not to prescribe it; in the second it is so dangerous that it should be used only by experts, which of course excludes everyone but the speaker; in the third its sphere of usefulness becomes more clearly defined and control of dosage and other factors help to minimise unwanted effects. Today has shown that digitalis, despite its double century, has not yet reached the haven of phase three.

It is said that the major requirements for success in life are high intelligence, great energy, and an ability to establish and maintain harmonious

relationships with everyone around. Withering's intellectual excellence and capacity for work are beyond question; in fact it is difficult to know how a man suffering from progressive phthisis could cope with such a huge practice and so many other scientific interests including botany, chemistry, and mineralogy. What he lacked was the knack of getting on with all comers. In fact he needed no lessons from Whistler in "the gentle art of making enemies." But despite this he prospered; his scientific and professional contribution was immense and his difficulty in personal relationships may in part have been due to his physical illness.

He was the only son of wealthy parents, Edmund Withering the Wellington apothecary and his wife Sarah, who was the daughter of George Hector, the Lichfield general practitioner, and the sister of Brooke Hector, the Lichfield physician, and Edmund Hector, the noted Birmingham surgeon. William Withering had two sisters. The elder, Mary, is thought to have been mentally subnormal and died early; the younger, Sarah, never married. It can be seen therefore how William became spoilt and developed personal qualities of the type we are now accustomed to see on the centre court at Wimbledon.

When Withering left Stafford Mr John Eld, who was largely responsible for getting the infirmary built, and Mr Hughes the secretary could not have been kinder but Withering did his best to pick a quarrel with them. He undertook to travel weekly from Birmingham to the infirmary until his successor was appointed, but the General Board arranged for his colleague at Stafford, Dr Campbell, to assume responsibility. After a petulant letter from Withering the Board let him have his way.

Erasmus Darwin, of Lichfield, as well as being a most able and successful physician, was a very knowledgeable botanist and had an eight acre botanic garden at Abnalls. He had great influence and this secured for Withering the vacancy left in Birmingham by Dr Small's death. He was a kind,

*Given on 18 April 1985 as part of the William Withering commemoration meeting.

benevolent, and generous man and was anxious to help Withering in any way possible, and when Withering was completing his book on British botany Darwin suggested that a short title such as "The Scientific Herbal", "Linnaean Herbal", or "English Botany" would help it to sell. Withering took offence at this suggestion and entitled it *The Botanical Arrangement of all the Vegetables naturally growing in Great Britain. With descriptions of the genera and species according to the system of Linnaeus with an easy introduction to the study of Botany*, an appellation by no means short! It was a poor effort being little more than a translation from Carl Linnaeus's *Genera plantarum* of the species found in Great Britain. The second edition in 1787–92 was a great improvement thanks to the generous help of Dr Jonathan Stokes, but Withering quarrelled with him and they both called in solicitors to act for them.

The rift between Withering and Darwin gradually became deeper and for this they were both to blame. Withering continued to nurse an imaginary grudge and Darwin began to retaliate. His brilliant medical student son Charles died at the age of 19 in Edinburgh from septicaemia due to a dissecting room wound and Darwin published his prize essay and medical dissertation together with a biographical memoir and an account of five patients treated with digitalis. The description of the five patients was almost certainly not written by Charles but was added by Erasmus. It was the first published description of the therapeutic use of digitalis and it infuriated Withering who was preparing *An Account of the Foxglove* and regarded it as his discovery. In addition, early in 1785 Darwin gave a paper entitled "An Account of the Successful Use of Foxglove in some Dropsies, and the Pulmonary Consumption" and it was later published in *Medical Transactions*. Another publication in 1785 from the Lichfield Botanic Society comprised an English version of Linnaeus's *Systema vegetabilium*. It was dedicated to Sir Joseph Banks, the President of the Royal Society, and favourably reviewed in the *Monthly Review*. This provoked cries of protest from Withering to the Editor, Dr Ralph Griffiths, for Withering knew that the Lichfield Society consisted only of Darwin and two others, Sir Brooke Boothby and Mr William Jackson.

The quarrel reached its height in 1788 when Mr Cartwright, a Wellington apothecary, called in both Robert Darwin, Erasmus's physician son from Shrewsbury, and Withering to see the same patient. They did not meet but there was increasingly discourteous correspondence and criticism one of each other. Mrs Frances Houlston, the patient, was a successful purveyor of religious tracts and she had some febrile abdominal illness which Withering diagnosed

as hepatitis. Despite being fought over by two Fellows of the Royal Society and a third in the background striving to manipulate the scene, the patient recovered and lived another 40 years. Perhaps the devil does look after his own.

Though Erasmus Darwin's conduct was by no means always correct he would have understood what Bertrand Russell meant when he said "I can't think why he dislikes me. I never did him any kindness."

Withering was fortunate in that he never had any financial worries. His parents were wealthy and he did not marry until a little over two years before he came to Birmingham and from the moment of his arrival his professional income was enormous. His first child, a daughter Helena, died when she was a little over a year old, though from what is not known. His second daughter, Charlotte, married Beriah Botfield when she was 28 and had but one child. His only son William took a degree at Edinburgh but confined his activities to publishing his father's memoir and republishing his books. The son lived at the Larches in Sparkbrook until 1820 when he moved to Wick House, Brislington, near Bristol dying there (not from overwork) in 1832 aged 56. His widow Lydia (née Rickards) continued to live there until 1867, when she died from senile dementia aged 82. There were no grandchildren and the name of Withering disappeared.

When Withering first came to Birmingham in 1775 he lodged with Mr Wheeley, a coachbuilder, at Number 10 The Square and had his consulting rooms at 9 Temple Row. Later he bought Number 15 The Square and also on part of a nearby plot of land which he purchased he built the Stone House in Corbett's Alley. In 1786 he took a 14 year lease of Edgbaston Hall and Park from Sir Henry Gough, living there until six days before his death when he moved to the Larches in Sparkbrook, which he had bought earlier that year from Mr W M Humphreys then of Cheltenham. None of these houses could be described as humble cottages.

In 1791 Edgbaston Hall was in grave danger of being sacked and burned by the rioting mobs. Many of its most valuable contents were moved into this church or elsewhere for safety and the assailants were bribed and plied with drink so that they became incapable of further action. Eventually the army arrived from Nottingham and quelled the riots but not before extensive damage had been done to houses in and around the city, but Edgbaston Hall itself escaped. Edgbaston Hall has stood on its present site since the Norman Conquest. It was destroyed during the Civil War but was rebuilt in 1717, the building being altered and modernised in 1852 by Sir Charles Barry. The reception after this service will be held

there and you will see that though it is now a golf clubhouse it is still quite an impressive building.

Withering's tuberculosis had been present for at least 23 years when he died: he suffered considerable fever, pleurisy, cough, and sputum, particularly during the winter, and in his later years he was much disabled by dyspnoea. He spent the winters of 1792–3 and 1793–4 in Portugal in the vain hope of climatic benefit, and when he returned to Edgbaston Hall in 1794, with Matthew Boulton's help, he contrived a form of air conditioning which kept the indoor temperature at about 65°F. In the winter he rarely went out and these measures undoubtedly prolonged his life. It is sad to think that among his many patients there must have been some who contracted tuberculosis from him but the infective nature of the disease, though suspected, was unproven until long after Withering's death.

The famous portrait of William Withering by Carl Frederik von Breda was painted in 1792 when von Breda was in England as court painter. The original is in the National Gallery at Stockholm but an excellent engraving from it was produced by W Bond and appeared as a frontispiece in *Miscellaneous Tracts* and Ridley made another for Thornton's collection. Many present here tonight will have seen the copy of the original painting in the Dean's room at our medical school. It was presented by K D Wilkinson with a hanging brass plaque describing the donor as "Professor of Pharmacology and Therapeutics in the University of Birmingham 1929–47 at a salary of £25 per annum." When A P Thomson became Dean,

Wilkinson had died and the plaque so wounded AP's warm heart that he had it replaced by one which omits all financial details.

What of Withering as a man? He was certainly highly intelligent and an obsessional worker. He had a breadth of scientific interest remarkable in a physician with such a huge practice, and for a man so preoccupied with seeing patients he was a good husband and father even though he did not teach his son to work. Why he wanted such a large practice is uncertain. His motives may have been entirely altruistic, but perhaps despite his comfortable financial circumstances he may have been imbued with a desire for greater wealth. He was certainly a difficult colleague, prickly and quarrelsome, and if he knew any amusing stories he kept them to himself.

The two great eighteenth century midlanders, Withering, who worshipped in this church, and Samuel Johnson, who was a diligent attender at St Mary's, Lichfield, and St Clement Danes in the Strand, were men of strong religious conviction. One cannot, however, imagine Withering capable of uttering the famous "scruples" prayer which typifies Johnson's humility and endeared him to so many:

"Enable me to break the chain of my sins, to overcome vain scruples and to use such diligence in lawful employment as may enable me to support myself and do good to others. O Lord forgive all the time lost in idleness; pardon the sins which I have committed, and grant that I may redeem the time misspent and be reconciled to thee by true repentance that I may live and die in peace."